

WHAT IS CLAIMED IS:

1. A process for forming a shaped composite article, comprising thermoforming a laminate into a desired shape, said laminate comprising a layer of an arylate polyester polymer and an adhering thermoplastic layer of a compatible resin, compression molding said shaped laminate together with a resin containing reinforcing material, said compatible resin to forming a composite of the desired shape having an outer layer of said arylate polyester polymer wherein an adherent bond is formed between the thermoplastic layer of the laminate and the reinforcing resin, said arylate polyester polymer layer comprising a weatherable resorcinol arylate having a class "A" finish.
2. A process for forming a shaped composite article according to claim 1 wherein the arylate layer is clear and the compatible resin layer comprises a colorant.
3. The method of claim 2, wherein said compatible resin is selected from the group consisting of an amorphous or crystalline resin.
4. The method of claim 2, wherein said compatible resin is selected from the group consisting of an aromatic polycarbonate resin, a polyester resin, and mixtures thereof.
5. A process for forming a shaped composite article according to claim 2 wherein composite of the desired shape has an outer layer of a clear arylate polyester polymer.
6. A process for forming a shaped composite article according to claim 3 wherein compatible resin is adherent to both the arylate polyester polymer and the resin containing fibrous material.
7. A process for forming a shaped composite article according to claim 3 comprising a balancing layer being positioned adjacent the reinforcing resin on the side opposite the laminate.

8. A process for forming a shaped composite article according to claim 3 wherein heat from the fiber reinforced material is utilized for heating and softening said laminate for obtaining an article with a Class-A surface.

9. A process for forming a shaped composite article according to claim 8 wherein said heat from said fiber reinforced material melts a portion of the compatible resin in said laminate for intimately bonding said laminate to said resin containing reinforcing material.

10. A method of making an article having a weatherable outer surface with a high quality finish appearance, said method comprising the steps of: providing a outer layer comprising resorcinol arylate polyester chain members; shaping said outer layer comprising resorcinol arylate polyester chain members into a three-dimensional shape in a vacuum-forming apparatus; placing said three-dimensional shape in a cavity of an compression molding apparatus; introducing a reinforced resin material comprising a compatible resin into the cavity of said compression molding apparatus behind said layer comprising resorcinol arylate polyester chain, joining said reinforced resin material to said layer .by compression molding.

11. A shaped composite article comprising a thermoformed aesthetic laminate having a desired shape, said laminate comprising a layer of an arylate polyester polymer and an adjacent adhering thermoplastic layer of a compatible resin, a compression molded resin layer containing reinforcing material, said compatible resin being adjacent to said thermoplastic layer to form a composite of the desired shape having an outer layer of said arylate polyester polymer wherein an adherent bond is formed between the thermoplastic layer of the laminate and the reinforcing resin, said arylate polyester polymer layer comprising a weatherable resorcinol arylate having a class "A" finish.

12. A shaped composite article comprising a thermoformed aesthetic laminate having a desired shape according to claim 11 wherein the peel strength between said aesthetic laminate is measured at a 90 degree peel, at a 200 lb. load cell, at a peel rate of 1"/min. and said peel strength is greater than 5 lb/inch.

13. A shaped composite article comprising a thermoformed aesthetic laminate having a desired shape according to claim 12 has a peel strength greater than 5 lb/inch.

14. A shaped composite article comprising a thermoformed aesthetic laminate having a desired shape according to claim 13 has a peel strength is greater than 5 lb/inch.